

NIKE MISSILE BATTERY PR-79, LAUNCH AREA
East Windsor Road, south of State Route 101
Foster
Providence County
Rhode Island

HAER No. RI-37-A

HAER
RI
4-FOST,
1A-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Northeast Region
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106

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HAER NO. RI-37-A

Location: East Windsor Road, south of State Route 101
Foster
Providence County
Rhode Island

UTM: Launch:
19/273140/4635700
19/273260/4635350
19/273120/4635300
19/273020/4635690

USGS Quadrangle: Clayville, RI

Date of
Construction: 1955

Engineer: United States Army Corps of Engineers with Contractors

Architect: United States Army Corps of Engineers with Contractors

Present Owner: Launch Site, Rhode Island State Police

Present Use: Launch Site, Rhode Island State Police Training Academy

Significance: The Foster NIKE Missile Battery PR-79 Launch Area contributes to the significance of the NIKE Missile Battery because it was here that missiles were assembled, armed and readied for launching, important components of the NIKE system. The Launch Area is an intact, physical manifestation of American military history.

Project Information: This mitigative documentation was undertaken in 1993 in accordance with Stipulation IV(A)(2) of the Programmatic Agreement for portions of the Defense Environmental Restoration Program (DERP), executed by the U. S. Army Corps of Engineers, New England Division.

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FOSTER NIKE BATTERY PR-79 BUILDING DESCRIPTIONS - LAUNCH AREA

Overall Description

The Launch Area, now owned by the Rhode Island State Police and used as their Training Academy, encompasses 14.85 acres and contains the original Barracks, Pump House and storage tank, well, Leaching Field, Generator Building, Missile Assembly Building, three Launch Magazines and original chain-link fence with razor wire.

The Launch Area is, for the most part, in its original configuration and is organized into three areas. Personnel structures, such as Barracks/Mess Hall, are located nearest to the entrance to the site. The missile assembly structures are located in the middle of the base. Farthest from the entrance, and the public, are three underground missile launchers. Space was reserved for three additional launchers, but they were never constructed although the land was kept open and only recently, probably within the last 10 years, allowed to regrow.

The site is campuslike, with mature evergreen trees and large areas of carefully groomed lawn and shrubs between the structures at the north and mid sections of the area. Some of this landscaping may well date to or predate the original construction; it was used for camouflage protection.

... any practical means of making [sites] ... inconspicuous from above should be considered. Measures which might help include protecting, with a view to preserving, existing trees and other vegetation ... and removing construction scars by appropriate planting, or otherwise harmonizing the developed areas with their surroundings. [1]

All the structures in the Launch Area are interconnected by concrete roads and walkways, which were important elements of the site. Firstly, they are indicative of the military's need for order, secondly, certain activities of the NIKE system were carried out from control and radar vans and many of the seemingly innocuous parking areas were, in reality, hardstands for vans. Asphalt roads and concrete walkways are in fair to good condition.

The layout of the Launch Area is intact, with only a small number of changes made by the State Police. The most obvious alterations are in the construction of a firing range and berm (part of the range) on the site of the Acid Fueling Station/Acid Storage Shed, and a protective berm built by the State Police sometime after they purchased the property in 1964. The construction of the State Police firing range, which involved removing a large earthen berm and fueling structures, has destroyed the integrity of this area of the site, since the Acid Fueling area was a critical component of the NIKE procedure. In the missile magazine area, aboveground storage and launcher racks were removed when the site was decommissioned. Other alterations are mostly modest interior changes. There is evidence of a guardhouse at the entrance gate in the form of a small concrete slab. Although the 1957 site drawings do not show a guardhouse, it could have been added later.

All of the buildings are painted gray with red trim and are in good condition. Aboveground features of the silos are painted gray as well.

Barracks/Mess Hall

The Barracks/Mess Hall originally housed enlisted men (EM), bachelor officers (BOs) and non-commissioned officers (NCOs), plus the Mess Hall. Today the building is still used as a Barracks and Mess Hall during the State Police's 20-week training course. Barracks and offices are in the western portion of the structure; the Mess Hall is located in the eastern portion. The building also contains two offices (used year-round) and a storeroom. The structure has undergone only minor changes. It is similar in plan to the 1954 standardized plans with the exception of the incorporation of the Mess Hall into the building instead of establishing it as a separate structure.

The building is a long, one-story, L-shaped structure, 40 x 60 x 150 feet, with a flat, sloped composition roof. It is constructed on a concrete slab, with concrete-block walls. There is a large brick chimney located on the north elevation of the structure. Concrete buttresses are evenly spaced on north and south elevations. There are weather-proof, wood-frame, enclosures that project from the main body of the building on the north, south and west; these include the main entrance and Mess Hall entrance. The front door contains two metal-framed, glass doors surrounded by a transom and side lights of sheet glass. Secondary exits and Mess Hall doors are metal, some with a small window in the upper portion. The north elevation has two double wood doors.

Windows, which are symmetrically placed on all elevations, are wood framed with 2/2 horizontal muntined panes.

Within the building, only minor changes have been made, and most of the original layout and materials can be seen. Structural columns are composed of three 2 x 4's; the beams are composed of three 1 x 6's and floors are still covered in their original asphalt tile.

Within the EM sleeping quarters, the State Police have added a partition to accommodate a classroom, and have enclosed an area of the same space to make a separate sleeping room for female police trainees. As originally built, walls were unfinished concrete block. Today, interior walls of the classroom and sleeping areas have been covered with particle board.

The two former NCO's quarters are today used for offices and have been sheathed in simulated wood paneling.

The original bathroom layout of toilets, multiple sinks and gang shower is intact, although the shower has been enlarged. To accommodate women, two toilets have been partitioned off from the other toilets and a second door added.

The Mess Hall was built as part of the Barracks but is accessible today only from an exterior entrance. It is not clear from a site inspection or available documentation where the original entrance was located. The arrangement of the mess, including kitchen, dining area, freezer and

bathrooms, is intact. While appliances, freezer and other kitchen equipment appear to be older, there is no written or visual evidence to determine whether this is original equipment. Again, the bathrooms have had two toilets partitioned off and a door added to accommodate females.

Missile Assembly Building

The Missile Assembly Building was originally used for assembling Ajax rocket components. Today, the building contains a boxing ring and is used for ammunition and general storage. While all of the original missile assembly and maintenance equipment has been removed, the building is intact as built, according to the standardized plans of 1954.

The building is a one-story, rectangular structure, 20 x 30 feet, built on a concrete slab, with concrete-block walls and a flat, sloped composition roof. Original steel joists are still in place. On the north and south elevations are wood and glass roll-up doors of the type used in garages. A metal personnel door is located on the south elevation. Windows are 1/1 wood-frame. On the east elevation is a one-story, concrete-block ell, 5 feet x 15 feet, with a flat, sloped composition roof. There is a wood-frame, double door on the north elevation and a metal door on the east elevation. A metal chimney and an oil tank also stand on the east elevation.

Original interior surfaces of concrete-block walls and concrete-slab flooring remain intact. Original wooden work cupboards and counters along the east elevation still remain and are used for storage. An ammunition cage of wood and metal mesh has been constructed in the southeast corner and some of the work cabinets are within this space. According to original drawings, this space was enclosed for storage when built. The ell contained a boiler and two toilets.

Generator Building

The Generator Building originally contained three auxiliary generators to convert electric current to be used in the event of power failures from the commercial grid.

The building is a one-story, rectangular structure, 15 x 30 feet, with corrugated metal walls and a corrugated metal gabled roof, all built on a concrete slab. There are four symmetrically arranged double wooden-plank doors on the east elevation. The west elevation has two double doors, both of wood (the northern door is sealed with a sheet of wood) and two narrow, vertical louvered windows. On the east and west elevations are small circular vent shutters which are symmetrically arranged. On the north and south elevations are small, triangular louvers in the eaves of the building. There appear to be few changes to the exterior of this structure.

The generators have been removed, but the concrete generator mounts (part of the concrete floor) are intact, as is a small wood- and glass-enclosed control room on the west elevation. The building is currently used for storage.

Underground Missile Storage Structures/Launch Magazines

Three Ajax missile Underground Storage Structures, or magazines, are located at the south end of the site. The magazines are surrounded by bituminous pavement and concrete, and the area is devoid of vegetation. Although the structures are maintained by the State Police, there is no activity in this area.

Each is identified by an area approximately 30 x 90 feet that is surrounded by a concrete curb. Within the curbing are two large steel elevator doors. Each magazine also contains double steel-doored entrance hatches, steel vents, air intake and ventilation pipes, and escape hatches.

The northernmost magazine contains an above-grade emergency decontamination shower and hose located between the entrance hatch and elevator. This magazine's elevator doors have been covered with dirt and plywood.

The aboveground features of the silos reveal little about the activities of the underground magazines, and there is no evidence of the aboveground missile racks and launchers, which have been removed. There is no access to the underground launcher magazines, as they have been sealed within the last two years.

Since the underground launcher magazines are sealed at PR-79, it was necessary to inspect, document and photograph launchers at the Quincy Site No. BO-37, Boston Defense Area.

The Quincy Launch Area has only two underground storage structures, instead of the usual three. The easternmost launch site was documented, since it was the one that had the least amount of debris in it.

The launcher is identical to the plans produced in 1953, "Underground Missile Storage Structure - Type "B" Plans by Leon Chatelain.

Each underground unit is constructed of reinforced concrete and is approximately 20 feet by 22 feet with an area on each end of the centrally located elevator that is extended about two feet beyond the perimeter of the magazine. It is entered through a hatchway which opens up to a flight of concrete stairs. At the base of the stairs is the large storage and launch room. All equipment, including loading and storage racks, has been removed, but the hydraulically operated elevator is in place as are the hydraulic cables. The elevator is in an "up" position with the metal bay doors open. The control panel for the elevator and other electrical switches are intact on the south wall of the magazine. On the north wall is a large metal venting system as well as a system of sump pumps.

Next to the staircase is a small personnel area which is approximately 5 feet by 7 feet and extends north beyond the magazine space. It consists of a narrow passage leading to a small personnel room. The rooms have been stripped of equipment but the walls are lined, floor to ceiling, with acoustical tiles.

Leaching Field

The Leaching Field is located immediately north of the Barracks and is operational today. It contains the field itself and a concrete pump house.

Water System

The water pump house, storage tank and well are located on the east side of the main access road, just inside the front gate. The pump house is a one-story, rectangular structure, 8 x 15 feet. It is built of concrete block, on a concrete slab with a flat, sloped roof. It contains a metal door on the west elevation and a wooden, 1/1 window on the north elevation. Inside is an operational water pump. The pump house is connected to a steel water tank, which in turn is connected to a concrete-covered well just south of the tank and pump house.

Electrical Switching Station

A small, one-story, concrete-block building, approximately 3 feet by 3 feet, is located just north of the Missile Assembly Building and contains electrical switching equipment. This structure has a metal door in its south elevation. The building has no windows.

Firing Range

A firing range was built by the State Police sometime after they purchased the property in 1965. The construction of the range involved removing a large earthen berm from the Acid Fueling Area. The Acid Fueling Area was a critical component of the NIKE procedure. Today, this section of the Launch Area is a large, flat, grassy area, set below grade, with wooden firing stands facing a large elliptical earthen berm. The berm has a wooden framework in front of it from which targets are hung.

The berm covers much of the concrete walkway that led from the Missile Assembly Building through the Acid Fueling Station to the missile magazines, although portions of this specially prepared walkway can be seen leading, in a U shape, from the Missile Assembly Building toward the berm. Behind the berm is a short, exposed expanse of grass.

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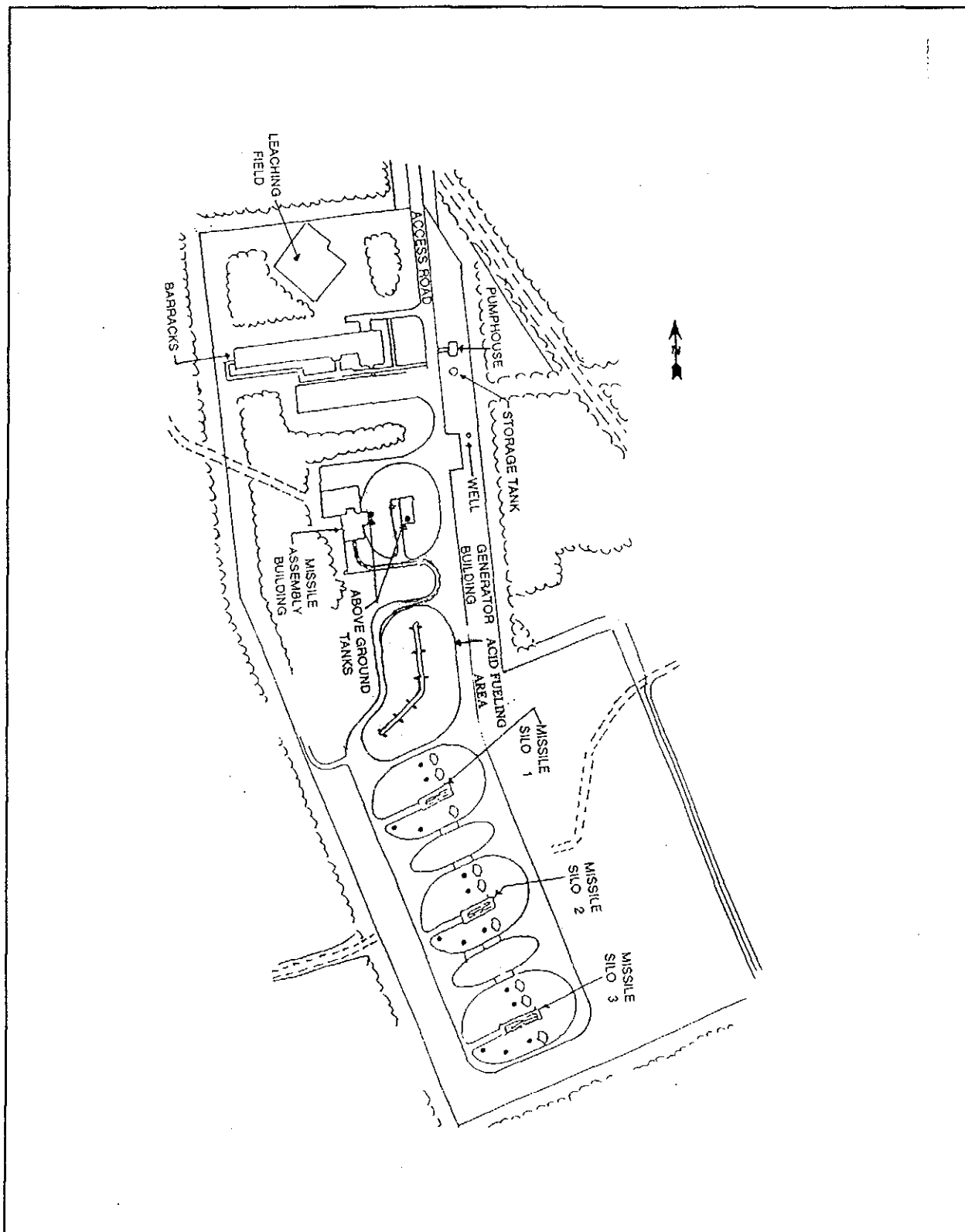
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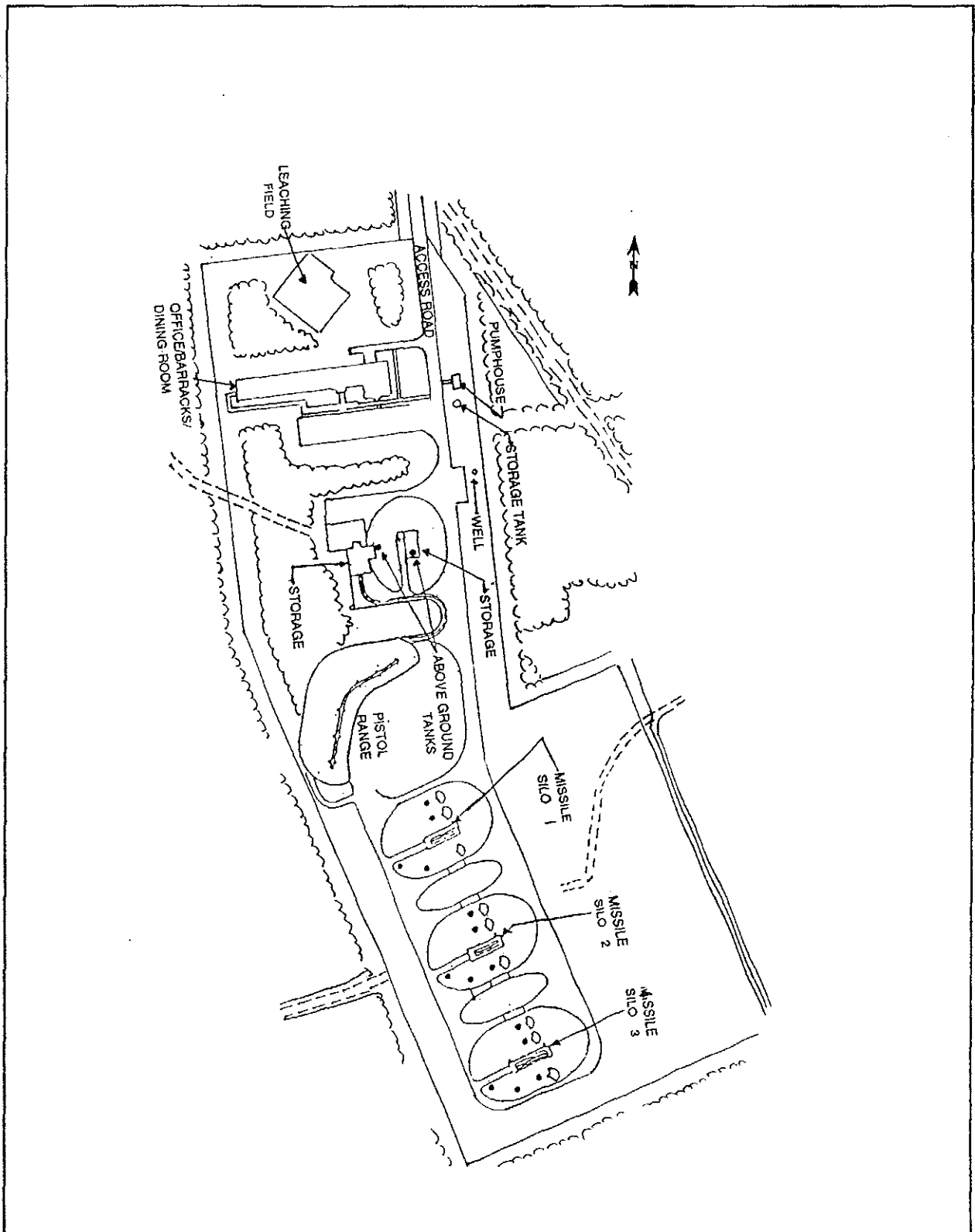
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